



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/518,292

12/16/2004

Mark W. Cater

25029/101/101

7055

5909

7590

11/20/2007

NAWROCKI, ROONEY & SIVERTSON
SUITE 401, BROADWAY PLACE EAST
3433 BROADWAY STREET NORTHEAST
MINNEAPOLIS, MN 554133009

EXAMINER

KASHNIKOW, ERIK

ART UNIT

PAPER NUMBER

4174

MAIL DATE

DELIVERY MODE

11/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,292	Applicant(s) CATER ET AL.	
	Examiner Erik Kashnikow	Art Unit 4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/16/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-10, 12-19 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehotonen et al. (US 4,996,062) in view of Bautista et al (US 6,824,802).

3. In regards to claims 1-4, 6-10 and 27 Lehotonen et al. teach a package which contains foodstuff, as well as a mixture of the enzymes glucose oxidase and catalase, which is used to eliminate oxygen from the atmosphere (column 3 lines 31-41).

4. Lehotonen et al. also teach the use of glucose as a substrate in their oxygen scavenging system (column 5 line 65-68).

5. In regards to claims 12- 13 Lehotonen et al. teach that glucose oxidase be present in quantities of 10-1000 Units (column 6 line 5), and catalase in quantities of the same amount (Column 3 line 57-58).

6. In regards to claims 24 -26 and 28 Lehotonen et al. teach that the composition can be incorporated into the package prior to the addition of the food product (column 6 line 49-52). The composition can also be embodied in a 3 dimensional form, when it is added to the actual food product (column 6 line 42-44).

7. Lehotonen et al. is however silent regarding the non aqueous dry buffering agent.

8. In regards to claims 16-19 Bautista et al. teach an antimicrobial composition for food products (column 1 lines 6-13). Bautista teach an acidifying reagent in combination with a buffer (column 2 line 44-51). Bautista teaches that sodium bicarbonate is a preferred embodiment for the neutralizing system (column 7 line 51). Bautista et al teach that the concentration of the acidifying agent and the neutralizing agent be from 1:1 to 1:10 (Column 7 lines 65-66).

9. In regards to claims 14 and 15 Bautista et al. teach that the acidifying agent, in the case of this invention the glucose source is present in an amount of 92 - 99.95%, and the neutralizing agent is present in amounts from 0.05 – 8% (column 7 lines 61-62).

10. It would be obvious to one of ordinary skill in the art to combine the two inventions because the invention of Bautista et al. provides for increased shelf life, and improving the robustness of the food without negatively affecting the flavor (column 1 lines 13-15).

11. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehotonen et al. (US 4,996,062) in view of Bautista et al (US 6,824,802) in further view of Stougaard et al. (US 6,251,626).

12. As stated above Lehotonen et al. and Bautista et al. teach a composition for use as an oxygen scavenging system for food. However both Lehotonen et al. and Bautista et al. are silent regarding the use of hexose oxidase.

13. Stougaard et al. teach that hexose oxidase is an enzyme that in the presence of oxygen can capable of oxidizing dextrose and a multitude of other reducing sugars (column 1 lines 19-20).

14. It would be obvious to one of ordinary skill in the art at the time of the invention to use this in the inventions of Lehotonen et al. and Bautista et al. because this enzyme can utilize a broader range of substrates and therefore make the claimed invention more flexible (column 1 lines 27-28).

15. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehotonen et al. (US 4,996,062) in view of Bautista et al (US 6,824,802) in further view of Ernst (US 5,284,871).

16. As stated above Lehotonen et al. and Bautista et al. teach a composition for use as an oxygen scavenging system for food. However both Lehotonen et al. and Bautista et al. are silent regarding the use of water permeable enclosures for the composition.

17. Ernst teaches storing an oxygen scavenging system in a water permeable container enclosed with the product, including pouches (column 8 line 67 to column 9 line 9). It would also be obvious to one of ordinary skill in the art that a pouch and enclosed pouch and a sachet are all different design choices for a pouch.

18. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Lehotonen et al. and Bautista et al. with the invention of Ernst because the invention of Ernst protects foods from discoloration and growth of bacteria yeast and molds (column 3 lines 24-31).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik Kashnikow whose telephone number is (571) 270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 4174

Erik Kashnikow
Examiner
Art Unit 4174

Application/Control Number: 10/518,292
Art Unit: 4174

Page 6